

PRIMES – TIMESEE

(comparison overview)

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Market Structure

- Both models are partial equilibrium models
 - PRIMES : energy system
 - TIMES-EE : electricity system
- Market Equilibrium through price and quantity adjustment
 - PRIMES : imperfect competition possible
 - TIMES-EE: perfect competition

Agent Behaviour

- Optimising behaviour in both PRIMES and TIMES-EE
 - PRIMES : adjustment dynamics is taking into account
 - TIMES-EE: no explicit adjustment mechanism, the changes are cost driven
- Constraints to reflect technical constraints or policy assumptions

Type of Data Input

- Technological data: same for both models
- Behavioural parameters
 - PRIMES: dynamic adjustment parameters and demand elasticities (price and income)
 - TIMES-EE: demand elasticities (price and income)
- Exogenous scenarios input, rather similar in both models (growth, energy prices)

Implications for Results

- Market prices
 - PRIMES: adjusted marginal cost pricing
 - TIMES-EE: marginal cost pricing
- Welfare impact evaluation
 - PRIMES: more complicated
 - TIMES-EE: straightforward